CLAIMS

What is claimed is:

1. A method for evaluating plane equations on a patch of pixels, comprising the actions of:
    evaluating the plane equations at a base location which is not external to the patch;
    computing plane equation valuation offsets for a plurality of spatial offsets from said base location.

2. The method of Claim 1, wherein said base location is on the patch's boundary.

3. A parallelized method for evaluating plane equations on a patch of pixels, comprising the actions of:
    converting the plane equations to a format in which x and y coordinates are referenced to a base location which is within one patch width from the patch being tested; and
    computing plane equation valuation offsets for a plurality of spatial offsets from said base location.

4. A parallellized method for rapidly testing membership of pixels in a fragment, comprising the steps of:
    (a.) defining half-plane membership functions with reference to a base point which is not outside the fragment;
    (b.) evaluating said membership functions at a base location which is not external to the patch; and
    (c.) clamping extreme values of said membership functions.

5. A parallellized method for rapidly testing membership of patches of pixels in a fragment, comprising the steps of:

(a.) defining half-plane membership functions with reference to a base point which is not outside the fragment;

(b.) evaluating said membership functions in parallel, for pixels of a patch; and

(c.) clamping extreme values of said membership functions.

6. The method of Claim 4, wherein said clamping step limits dynamic range of said membership functions to less than 10 bits.

7. The method of Claim 5, wherein said clamping step limits dynamic range of said membership functions to less than 10 bits.